

### **LISTING OF THE CLAIMS:**

1. (Original) A pyrotechnic composition for producing IR-radiation,  
characterised in that  
fluorinated spherical, carbocyclic cage molecules or polymers with such fluorinated cage molecules as monomers are included as an oxidation agent, and  
a halophilic metal combining with fluorine in an exothermic reaction or such a metal alloy is contained as a fuel.
2. (Original) A pyrotechnic composition according to claim 1 characterised in that fluorinated spherical, carbocyclic cage molecules of the general formula  $(CR^F)_n$  with  $R^F = C_mF_{2m+1}$  or polymers with such fluorinated cage molecules as monomers are included as an oxidation agent, wherein n is a natural number and m is a natural number including 0.
3. (Original) A pyrotechnic composition according to claim 2 characterised in that  $m = 0$  or 1.
4. (Original) A pyrotechnic composition according to claim 2 or claim 3 characterised in that  $n = 4, 6, 8, 20, 60$  or 70.
5. (Original) A pyrotechnic composition according to claim 4 characterised in that  $(CF)_4$ ,  $C_4(CF_3)_4$ ,  $(CF)_6$ ,  $C_6(CF_3)_6$ ,  $(CF)_8$ ,  $C_8(CF_3)_8$  and/or  $(CF)_{20}$  is included as an oxidation agent.

6. (Original) A pyrotechnic composition according to claim 1 characterised in that polyfluorofullerenes of the general formula  $C_{60+2n}F_{2m}$  or polymers with such polyfluorofullerenes as monomers are included as an oxidation agent, wherein n is a natural number including 0 and m is a natural number.
7. (Original) A pyrotechnic composition according to claim 6 characterised in that  $C_{60}F_{48}$  and/or  $C_{60}F_{60}$  is included as an oxidation agent.
8. (Original) A pyrotechnic composition according to claim 1 characterised in that polyfluorofullerenes of the general formula  $C_{60+2n}R_m^1R_b^2Z_y$  or polymers with such polyfluorofullerenes as monomers are included as an oxidation agent, wherein  $R^1$  is a straight or branched hydrocarbon chain or an aromatic radical with up to 100 carbon atoms,  $R^2$  is a straight or branched fluoroalkyl with up to 100 carbon atoms and Z is a hydrogen, fluorine, or chlorine atom, and wherein n, m and y are natural numbers including 0 and b is a natural number.
9. (Currently Amended) A pyrotechnic composition according to ~~one of claims 1 to 8~~ claim 1 characterised in that the fuel is a metal from the group of the metals lithium, beryllium, magnesium, zinc, calcium, strontium, barium, boron, aluminium, titanium, zirconium, hafnium or a mixture or alloy of said metals.
10. (Original) A pyrotechnic composition according to claim 9 characterised in that the fuel is magnesium.

11. (Currently Amended) A pyrotechnic composition according to ~~one of claims 1 to 10~~ claim 1 characterised in that the molar stoichiometry of the pyrotechnic composition complies with the formula

$$\Phi / M \leq w$$

wherein  $\Phi$  is the number of fluorine atoms per fluorinated spherical carbocyclic cage molecule or monomer, M is the number of metal atoms and w is the maximum degree of oxidation of the metal.

12. (Currently Amended) A pyrotechnic composition according to ~~one of claims 1 to 11~~ claim 1 characterised in that the oxidation agent is sublimated on to the metal.